

# EARLY SIMPLE MACHINES

## 9656 Early Simple Machines and Curriculum

**Cost: \$230.00 (ex-GST)**

Contains 101 DUPLO® elements. The set builds 8 mechanical models including:

- Gears;
- Levers;
- Pulleys;
- Wheels & Axles

The Curriculum, freely downloaded, provides 8 lessons, extension activities and problem solving tasks. The student record sheets involve the students in investigating, problem solving and scientific recording.

[www.legoeducation.com/downloads](http://www.legoeducation.com/downloads)

### WHAT TO BUY

#### Early Simple Machines Packs

ESM6 - for 6 students

• 3 x 9656  
**Cost: \$690.00 (ex-GST)**

ESM12 - for 12 students

• 6 x 9656  
• 1 X PD Voucher  
**Cost: \$1,280.00 (ex-GST)**  
**SAVE \$200.00**

ESM24 - for 24 students

• 12 x 9656  
• 2 X PD Voucher  
**Cost: \$2,520.00 (ex-GST)**  
**SAVE \$440.00**

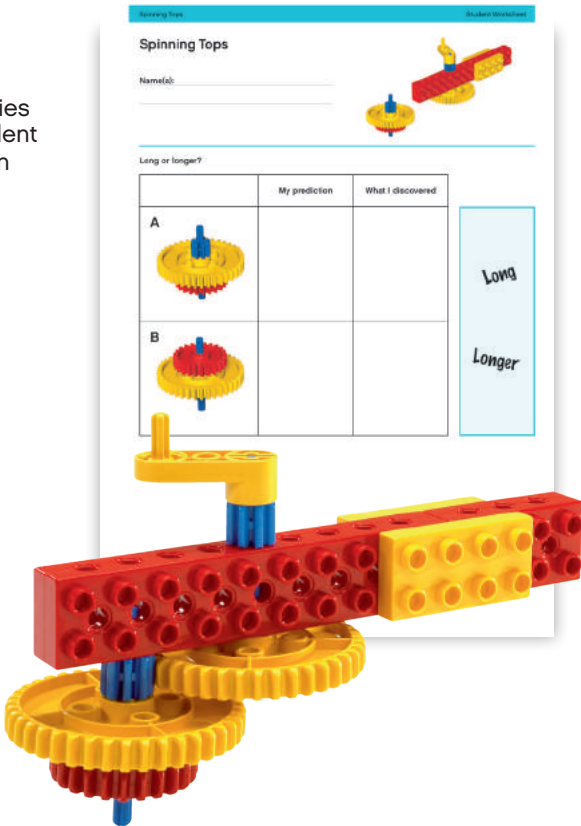
KEY

LEARNING

VALUES

- Develop creativity, collaborative and problem solving skills
- Using the design engineering process
- Playfully investigating the principles of simple machines and structures

## Year Level 1-2



# SIMPLE MACHINES

## 9689 Simple Machine Set and Curriculum

**Cost: \$110.00 (ex-GST)**

This set contains 204 LEGO® elements. An engaging hands-on tool to introduce basic principles of:

- Gears
- Levers
- Pulleys
- Wheels & Axles

The Curriculum, freely downloaded, features 16 principle, 4 main and 4 problem solving activities. Student record sheets are provided for recording predictions and investigations.

[www.legoeducation.com/downloads](http://www.legoeducation.com/downloads)

### WHAT TO BUY

#### Simple Machines Packs

SM8 - Simple Machines for 8 students

• 4 x 9689  
**Cost: \$440.00 (ex-GST)**

SM16 - Simple Machines for 16 students

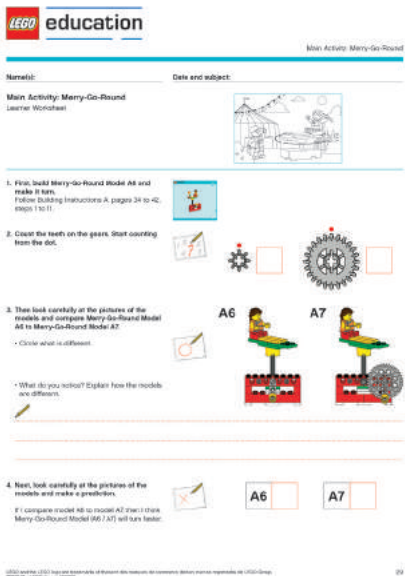
• 8 x 9689  
**Cost: \$830.00 (ex-GST)**  
**SAVE \$50.00**

SM24 - Simple Machines for 24 students

• 12 x 9689  
• 1 XPD Voucher  
**Cost: \$1,170.00 (ex-GST)**  
**SAVE \$250.00**



## Year Level 3-4



Engage your students in STEM and inspire Maker experiences using Simple Machines or Powered Machines and the MAKER curriculum freely downloaded.

# POWERED MACHINES

## 9686 Powered Mechanism Set and Curriculum

**Cost: \$300.00 (ex-GST)**

This set builds real life machines incorporating:

- Gears;
- Levers;
- Pulleys;
- Wheels & Axles

10 basic principle models and 18 main models. Contains 396 elements including motor and battery pack.

### Powered Mechanism Curriculum freely downloaded

Covers concepts in forces and motion, energy and structures. Includes lesson plans and student record sheets.

### Advanced Mechanisms Curriculum freely downloaded

Real life video clips. 20 lessons investigating forces, equilibrium, friction and mechanical advantage. Includes lesson plans and student record sheets.

KEY

LEARNING

VALUES

- Investigating simple and advanced mechanisms
- Deepening the understanding of physics and maths concepts
- Engage students in practical, open-ended engineering challenges and open-ended problem solving

### WHAT TO BUY

#### Powered Machines Packs

PM6 - Powered Mechanisms for 6 students

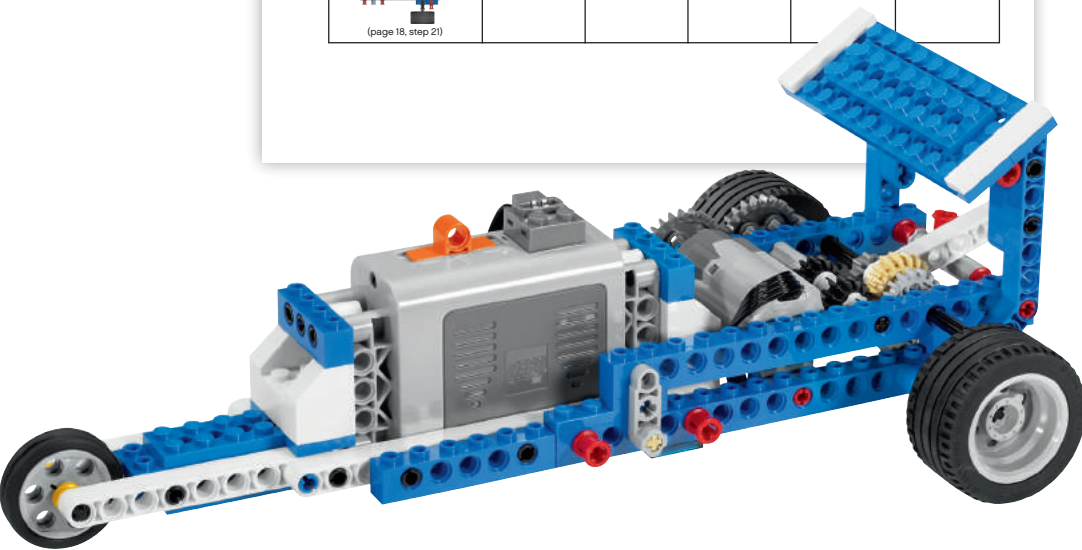
• 3 x 9686  
**Cost: \$850.00 (ex-GST)**  
**SAVE \$50.00**

PM12 - Powered Mechanisms for 12 students

• 6 x 9686  
• 1 X PD Voucher  
**Cost: \$1,600.00 (ex-GST)**  
**SAVE \$300.00**

PM24 - Powered Mechanisms for 24 students

• 12 x 9686  
• 2 X PD Voucher  
**Cost: \$3,100.00 (ex-GST)**  
**SAVE \$700.00**



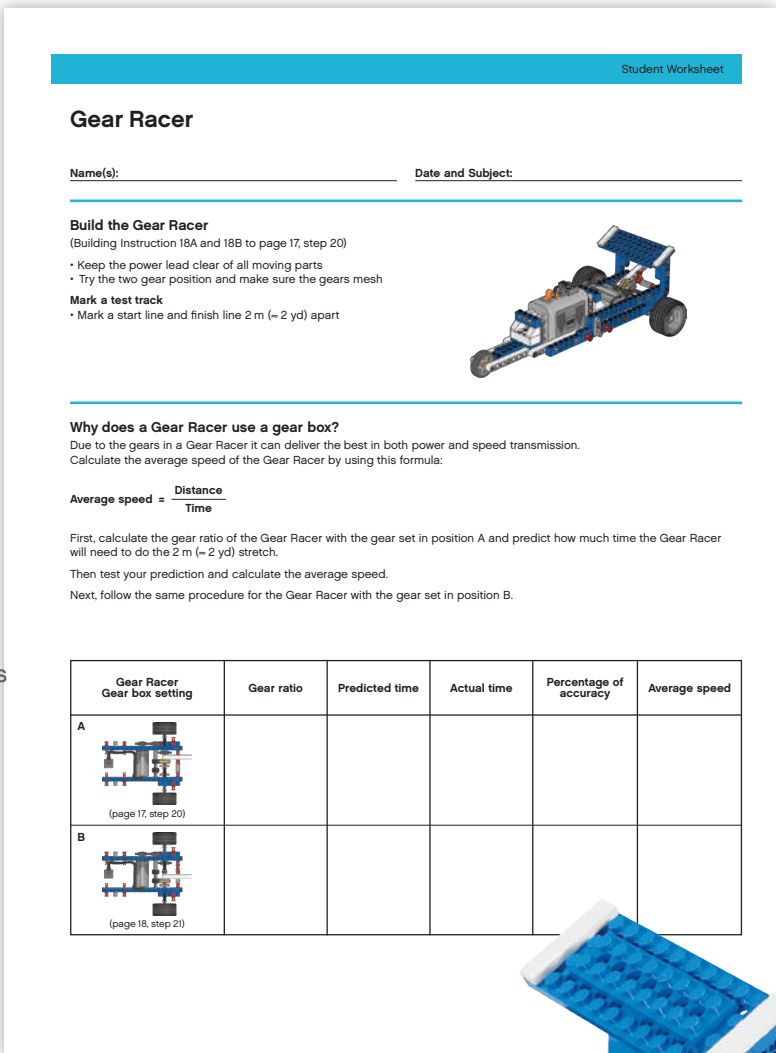
[www.mooreed.com.au](http://www.mooreed.com.au) for the full range of



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## Year Level 5-8



education

2019

CREATE

COLLABORATE

CODE



[www.mooreed.com.au](http://www.mooreed.com.au)

for Teacher Professional Learning

### About LEGO® Education

LEGO Education provides a continuum of hands-on, playful learning tools that engage every student's natural curiosity and help them develop the skills and confidence they'll need in the future.

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[sales@mooreed.com.au](mailto:sales@mooreed.com.au)

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# ™ **WeDo 2.0** A complete STEAM solution For Early Years

45300 LEGO® Education WeDo™ 2.0 Core Set, Software and Curriculum

**Cost: \$280.00 (ex-GST)**

Includes core software and full curriculum (downloaded), smart hub, medium motor, motion sensor, tilt sensor, and LEGO® bricks. The GET STARTED PROJECTS introduce students to the hardware and coding with the building and programming of Milo, a space rover.

There are 12 Guided Projects and 12 Open Projects to enhance the core software and engage the students in computational thinking:

- LIFE SCIENCE – life cycles, habitats, environment
- ENGINEERING – design projects, prototyping and testing
- PHYSICAL SCIENCE – forces, motion, cause and effect
- EARTH & SPACE SCIENCE – climates and weather patterns.

Comprehensively linked to the Australian National Curriculum.

Requires 2x AA batteries or rechargeable battery 45302 and charger 45517.

## ENHANCING THE **LEGO® LEARNING** EXPERIENCE

Compatibility with third party coding platforms allows students to easily learn different coding languages.

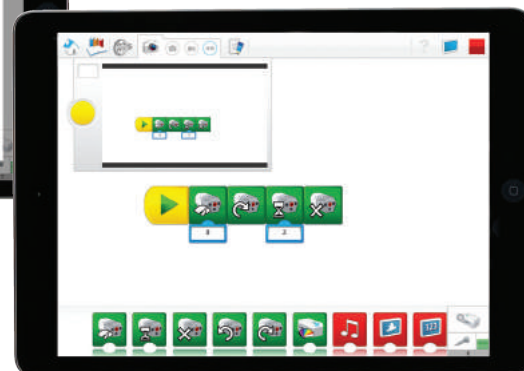
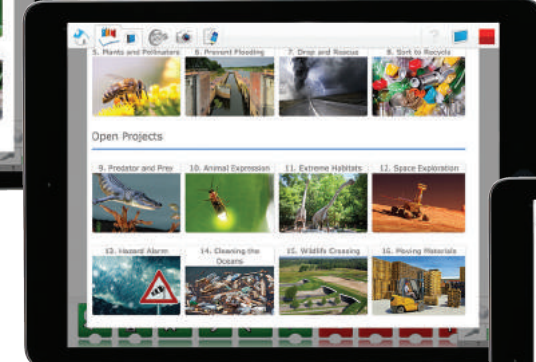
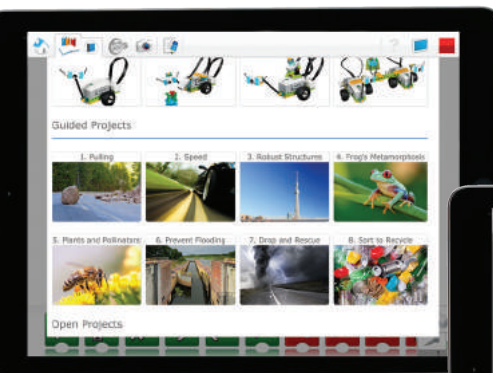
LEGO® Education WeDo 2.0 is compatible with Scratch and Tynker. LEGO® MINDSTORMS® Education EV3 is compatible with Apple Swift Playgrounds, Microsoft MakeCode and Scratch.

MAKER Activities and lessons are freely available to download [www.legoeducation.com/downloads](http://www.legoeducation.com/downloads)



# MAKER

Engage your students in STEM and inspire Maker experiences using WeDo 2.0 or EV3 and the Maker curriculum freely downloaded.



### WHAT TO BUY

- WeDo™8 - for 8 students**
- 4 x 45300
  - 1 x PD Voucher
- Cost: \$1070.00 (ex-GST)**  
**SAVE \$150.00**
- WeDo™16 - for 16 students**
- 8 x 45300
  - 2 x PD Vouchers
- Cost: \$2,090.00 (ex-GST)**  
**SAVE \$350.00**
- WeDo™24 - for 24 students**
- 12 x 45300
  - 4 x PD Vouchers
- Cost: \$3,060.00 (ex-GST)**  
**SAVE \$700.00**



**45517 – Battery Charger**  
**Cost: \$55.00 (ex-GST)**



**45302 Rechargeable Battery**  
**Cost: \$100.00 (ex-GST)**

**WeDo™ 2.0 replacements available on [www.mooreed.com.au](http://www.mooreed.com.au)**  
**Contact Moore Educational for a storage trolley solution.**

## LEGO education **MINDSTORMS® EV3** Robotics For Middle Years

45544 LEGO® MINDSTORMS® Education EV3 Core Set, Software and Curriculum

**Cost: \$670.00 (ex-GST)**

Includes EV3 core software and curriculum freely downloaded.

Create engaging curriculum focused learning with EV3.

- EV3 Coding Activities
- EV3 Design Engineering Projects
- EV3 Space Challenge
- EV3 Science Activities

541 elements, including:

EV3 intelligent brick 2 x large motors, 1 x medium motor, 1 x colour sensor 1 x ultra sonic sensor, 1 x gyro sensor 2 x touch sensors, 1 x rechargeable battery, RJ12 connectors, storage box and sorting trays.

45517 battery charger required

**Cost: \$55 (ex gst)**



### KEY LEARNING VALUES

- Develop Computational Thinking skills through coding and solving real-world problems
- Create algorithms (a series of ordered steps)
- Engage students in practical, open-ended engineering challenges and open-ended problem solving

### WHAT TO BUY

- EV32 for 2 students**
- 45544 EV3 Core Set
  - 45517 Charger
- Cost: \$700.00 (ex-GST)**
- EV38 for 8 students**
- 4 x 45544 EV3 Core Sets
  - 2 x 45517 Chargers
  - 1 x PD Voucher
- Cost: \$2,590.00 (ex-GST)**  
**SAVE: \$300.00**
- EV316 for 16 students**
- 8 x 45544 EV3 Core Sets
  - 4 x 45517 Chargers
  - 3 x PD Vouchers
- Cost: \$5,020.00 (ex-GST)**  
**SAVE: \$860.00**
- EV320 for 20 students**
- 10 x 45544 EV3 Core Sets
  - 5 x 45517 Chargers
  - 4 x PD Vouchers
- Cost: \$6,175.00 (ex-GST)**  
**SAVE: \$1,200.00**

### 45 Step-by-Step Tutorials included in core software

- **Software Introduction**
  - Basic programming (1 hour)
  - Data wires
  - Data logging
- **Advanced** (12 hours)
  - Loop / Switch
  - Maths / Trigonometry
  - Variable / Arrays
  - Logic / Calibration
  - Sending messages
- **Hardware Introduction**
  - Sound, light display (4 hours)
  - Motors, sensors
  - On brick programming
- **Graphing** (5 hours)
  - Data logging
  - Prediction / Analysis
  - Data set calculations
  - Graph programming
- **Basics** (5 hours)
  - Turns, angles
  - Avoid objects
  - Follow a line
- **Tools** (5 hours)
  - Sound editor
  - Image editor
  - Remote control
  - My blocks

## Compatible with **iPad Chrome book** Android

## LEGO education **MINDSTORMS® EV3** Space Challenge

45570 LEGO® MINDSTORMS® Education EV3 Space Challenge Set and Curriculum

**Cost: \$360.00 (ex-GST)**

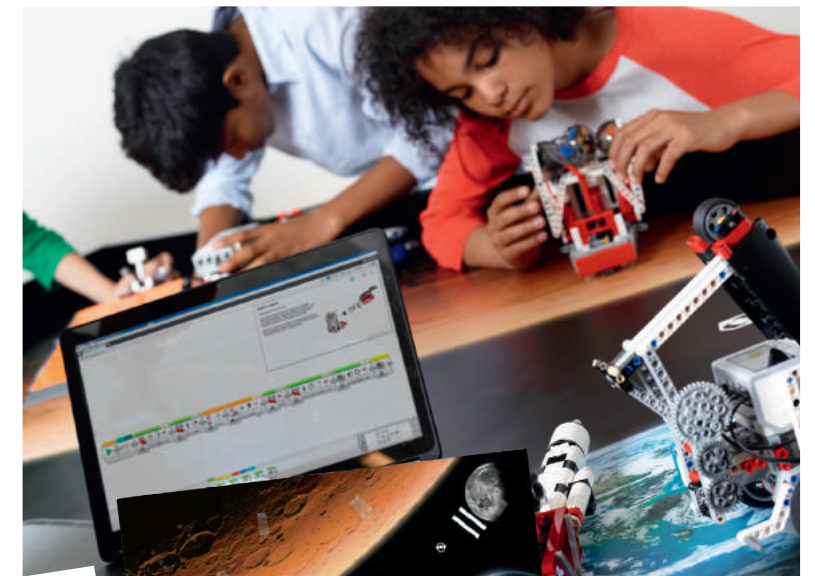
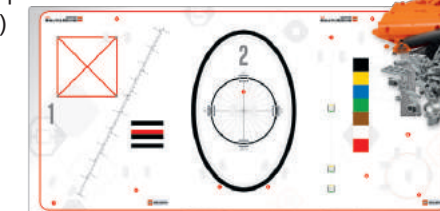
Teach CODING and STEM concepts around the theme of a mission to Mars using your EV3 robots with this set and curriculum.

Includes 3 x training mats, 1 x space mat, LEGO® Bricks. Requires 45544 sets.

### Space Challenge Curriculum downloaded

Includes:

- 9 Learning Missions encouraging investigation, observation and calculation.
- 7 Challenge Missions to design robots to solve real world space challenges.
- Research Projects to ignite curiosity of space exploration (Robots not included.)



**Year Level 5-6**

### Add an Expansion Set to the EV3 Core Set to build bigger.

45560 LEGO® MINDSTORMS® Education EV3 Expansion Set

**Cost: \$180.00 (ex-GST)**

853 elements to create six more complex robots. Building plans in EV3 core software.

- Elephant
- Stair Climber
- Tankbot
- Remote Control
- Spinning Line
- Znapp

